

Work Order ID 53488

November 6, 2009 8:43:53 AM



Page 1

Item ID: D3650-7

Revision ID: C

Item Name: Seal

Start Date: 06/11/2009 Start Qty: 4.00

Required Date: 13/11/2009 Req'd Qty: 4.00

Reference:

Accept



Setup Start



Stop



Cust Item ID:

Customer:

Approvals:

Process Plan: *RL*

Date: *09-11-11*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3650

Rev C

100

0.00



Packaging

Packaging

Memo

0.00

Packaging

Cut 8168-1 seal 8.19" long as per dwg D3650

8/12/11 *(4)*

110

0.00



QC5- Inspect part completeness to step on W/O

QC

Memo

0.00

Quality Control

→ 8/12/11

(4)

120

0.00



Identify as per dwg & Stock Location:

Packaging

Memo

0.00

Packaging

9/12/11 *(4) SP*

Work Order ID 53488

November 6, 2009 8:43:53 AM



Page 2

Item ID: D3650-7

Accept



Setup Start



Revision ID: C

Stop



Item Name: Seal

Start Date: 06/11/2009 Start Qty: 4.00



Cust Item ID:

Required Date: 13/11/2009 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____


Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 	QC21- Final Inspection - Work Order Release	0.00							
QC Quality Control	Memo	0.00							

09/12/14 *[Signature]*
PP 09-12-11
(4)

Picklist Print

Page 1

November 6, 2009 8:43:57 AM

Work Order ID: 53488

Parent Item: D3650-7RevC

Parent Item Name: Seal



Comments:

Start Date: 06/11/2009

Required Date: 13/11/2009

Start Qty: 4.00

Required Qty: 4.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
81681  SEAL		Purchased	No			100	Each	5.5050	2.9474 		<u>09/12/11</u>	

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

5.505

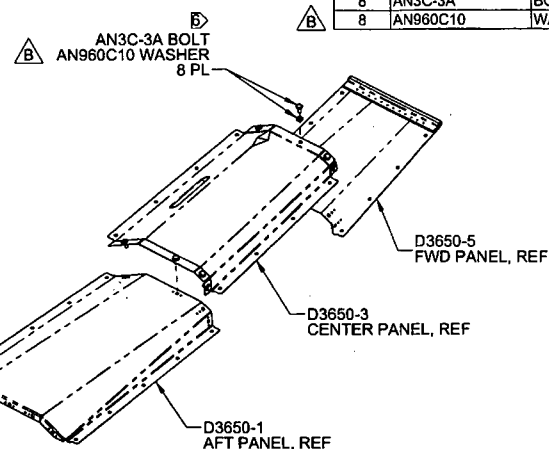
106312

5.505

2.947

8 7 6 5 4 3 2 1

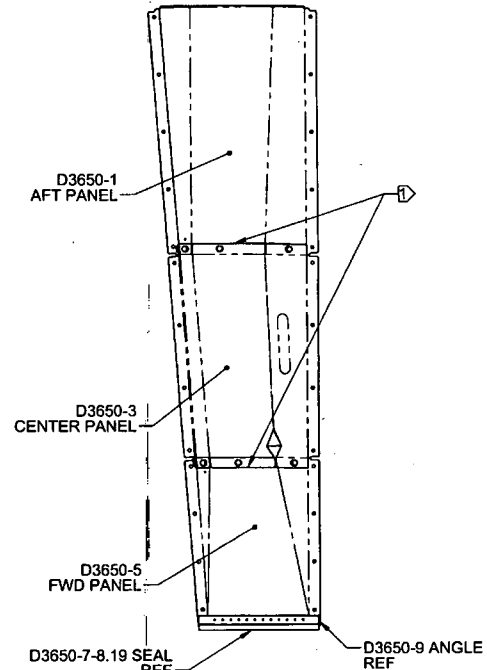
QTY -041	PART NUMBER	DESCRIPTION
X	D3650-041	TUNNEL TOP PANEL ASSEMBLY
1	D3650-1	AFT PANEL
1	D3650-3	CENTER PANEL
1	D3650-5	FWD PANEL
8	AN3C-3A	BOLT
8	AN960C10	WASHER



DEO ATTACHED

UNDER REVIEW
OK 07.05.08
PAR 05.04.08
RELEASED
07.11.07

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED
SUBJECT TO APPROVAL
WITHOUT WORK
WORK ORDER
NO. 53485
P104-11-6



D3650-041 TUNNEL TOP PANEL ASSEMBLY

- NOTES:
- 1) SEAL ALL MATING SURFACES AND ALL GAPS USING PROSEAL 700 FIRE WALL SEALANT
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE
 - 6) TORQUE FASTENERS 15 TO 25 in-lb
 - 7) WEIGHT: 3.3 lbs

C	REFORMATTED TO NEW STANDARDS; RELOCATED PART LIST (ZN D2-2); ADDED SECTION VIEW J-J & REVISE DIMENSIONS (ZN B7-5, C4-5); ADDED RECESS LOCATION & REVISED DIMENSIONS (ZN C6-6, D5-6); MS20615-4MS WAS CR3523-4-03 & NAS1149CN432R WAS AN960C4 (ZN D9-7; B9-7; B8-7)	RF	08.10.14
B	SHEETS 1, 2 & 7: UPDATED FASTENER QUANTITIES; UPDATED VIEWS SHEETS 3 & 8: REMOVED/RELOCATED HOLES; UPDATED VIEWS SHEET 4: 1.8 WAS 1.5; 1.0 WAS 0.8; UPDATED VIEW; ADDED NOTE 8 SHEET 5: REMOVED NOTE IN C8 & ASSOCIATED DIMS; UPDATED VIEWS SHEET 6: REMOVED/RELOCATED HOLES & ADDED CUTOUT TO D3650-3F; MOVED D3650-11/-11F TO SHEET 9; ADDED DETAIL I SHEET 9: RELOCATED D3650-11/-11F FROM SHEET 6; UPDATED DIMS OF D3650-11/-11F	RF	08.01.07
A	NEW ISSUE	RF	07.11.07
REV.	DESCRIPTION	BY	DATE
DESIGN	RF		
DRAWN	RF		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.10.14		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO.
D3650

TITLE
TOP PANEL ASSEMBLY

REV. C
SHEET 1 OF 9

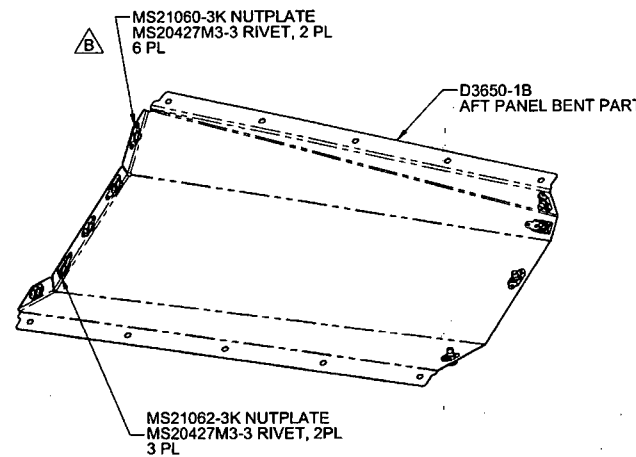
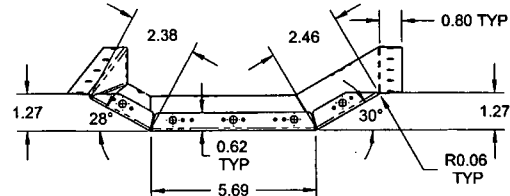
SCALE
1:8

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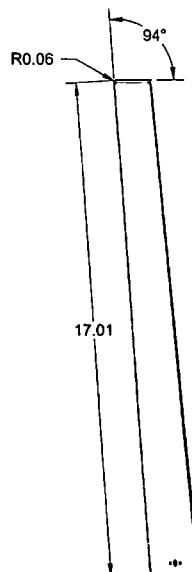
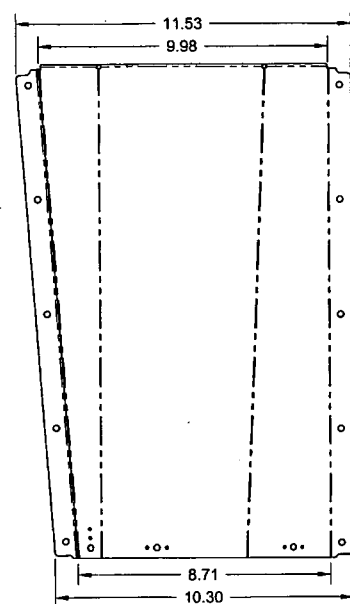
8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

QTY -1	PART NUMBER	DESCRIPTION
X	D3650-1	AFT PANEL
1	D3650-1B	AFT PANEL BENT PART
18	MS20427M3-3	RIVET
6	MS21060-3K	NUTPLATE
3	MS21062-3K	NUT PLATE



D3650-1 AFT PANEL



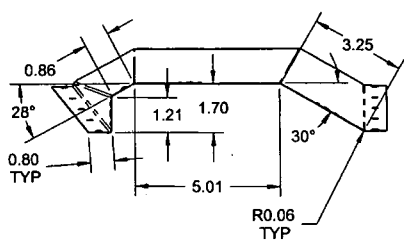
DEO ATTACHED

UNDER REVIEW
OK
09/02/03
09/02/03

RELEASED
04/11/17

W/O 53488

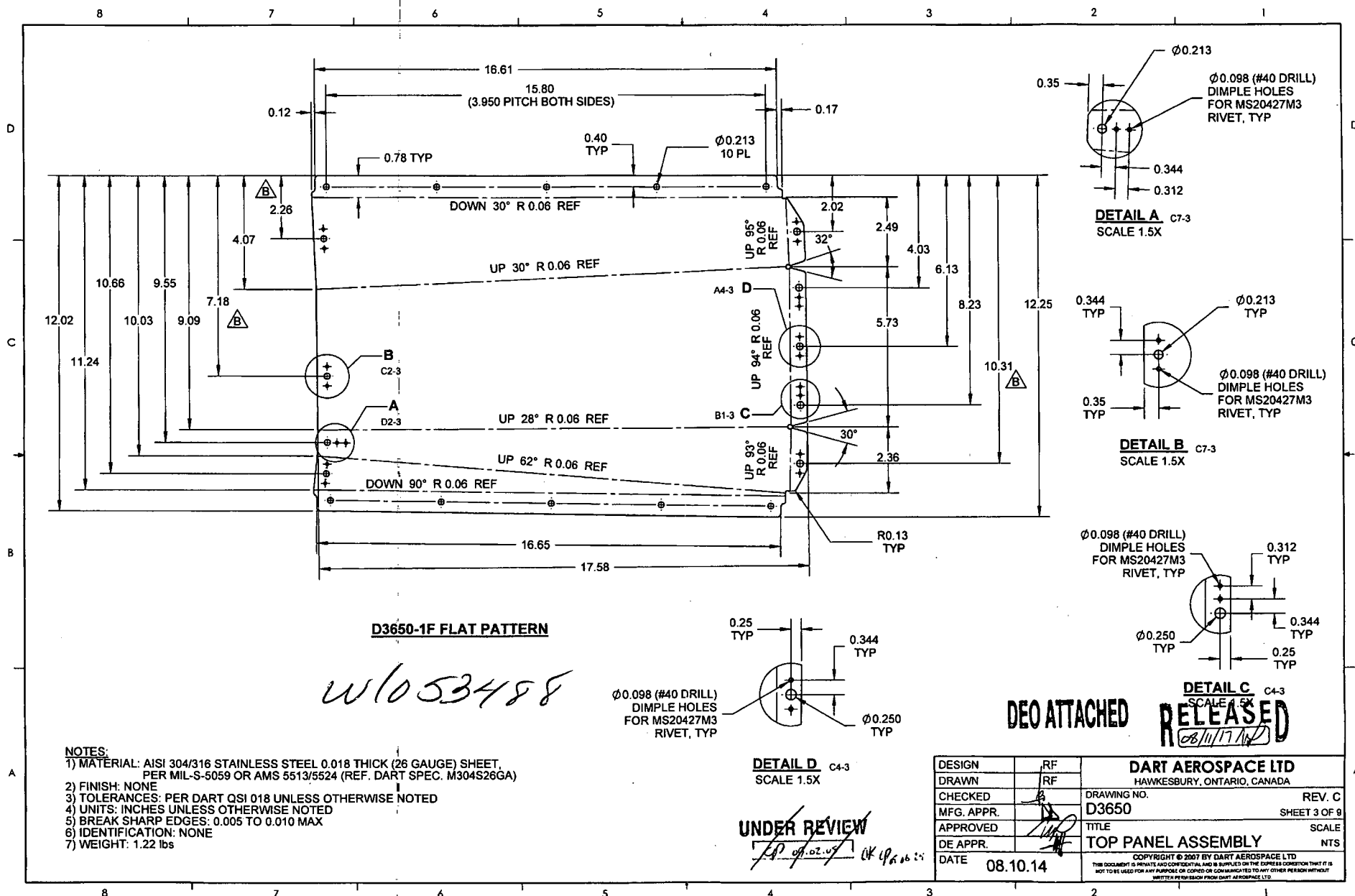
D3650-1B AFT PANEL BENT PART
(MAKE FROM D3650-1F FLAT PATTERN)



- NOTES:
- 1) FINISH: NONE
 - 2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 3) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 5) IDENTIFICATION: NONE
 - 6) WEIGHT: 1.3 lbs

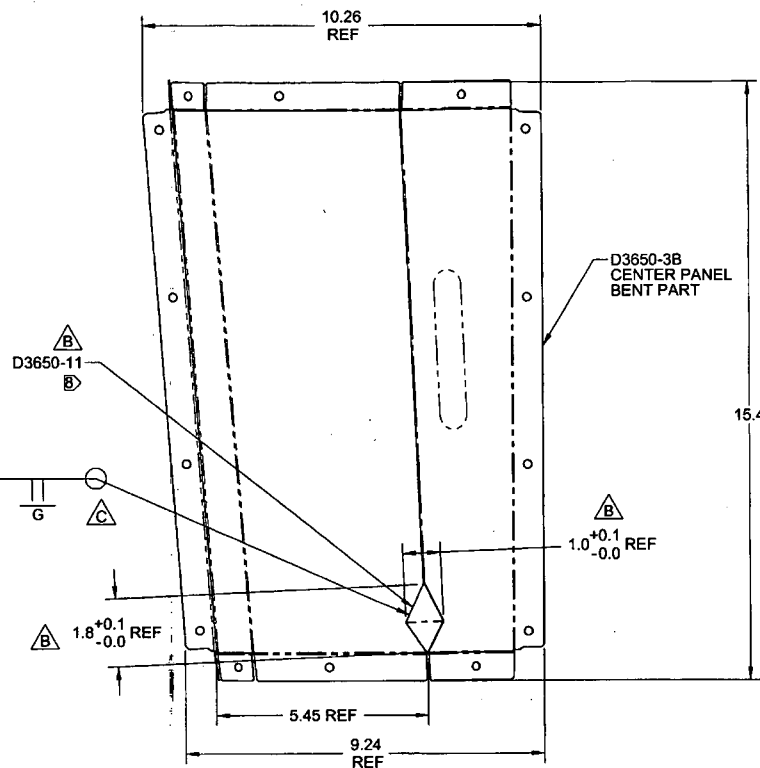
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DRAWN	RF		
CHECKED		DRAWING NO. D3650	REV. C
MFG. APPR.		TITLE TOP PANEL ASSEMBLY	SHEET 2 OF 9
APPROVED		SCALE	NTS
DE APPR.		COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	08.10.14		

8 7 6 5 4 3 2 1

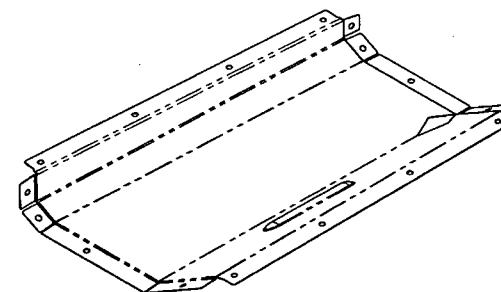


QTY -3	PART NUMBER	DESCRIPTION
X	D3650-3	CENTER PANEL
1	D3650-3B	CENTER PANEL BENT PART
1	D3650-11	FILLER PLATE

IT IS ACCEPTABLE
TO GRIND & LEAVE
0.03 FROM BOTTOM
FLAT SURFACE



D3650-3 CENTER PANEL
(LOOKING FROM OUT SIDE SURFACE)



DEO ATTACHED

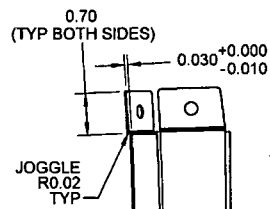
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08-11-17/10

NOTES:

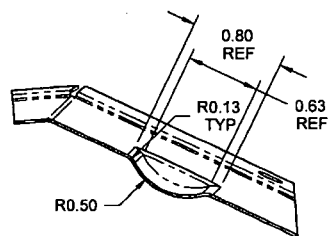
- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.0 lb
- 8) TRIM D3650-11 TO FIT AS REQUIRED

UNDER REVIEW

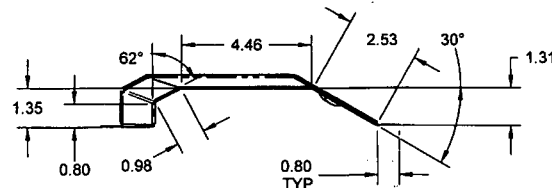
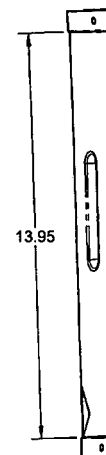
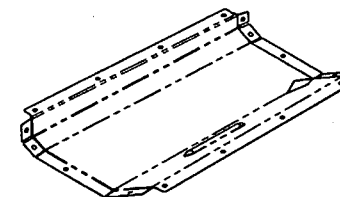
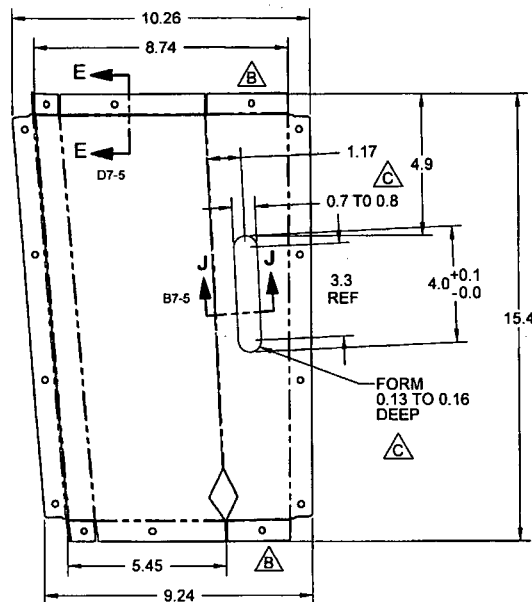
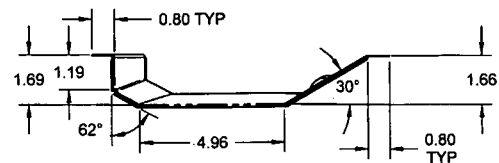
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DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 4 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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SECTION E-E D5-5
SCALE 2X



SECTION J-J C5-5 \triangle
SCALE 3.5X



D3650-3B CENTER PANEL BENT PART
(MAKE FROM D3650-3F FLAT PATTERN)


- NOTES:
1) FINISH: NONE
2) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
3) UNITS: INCHES UNLESS OTHERWISE NOTED
4) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
5) IDENTIFICATION: NONE

UNDER REVIEW

W/053488

DEO ATTACHED

RELEASED

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 5 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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MS21062-3K NUTPLATE
MS20427M3-3 RIVET, 2 PL
2 PL

MS21060-3K NUTPLATE
MS20427M3-3 RIVET, 2 PL
2 PL

PART LIST

QTY	PART NUMBER	DESCRIPTION
X	D3650-5	FWD PANEL
1	D3650-5B	FWD PANEL BENT PART
1	D3650-7-8.19	SEAL
1	D3650-9	ANGLE
12	NAS1149CN432R	WASHER
12	MS20615-4M5	RIVET
8	MS20427M3-3	RIVET
2	MS21060-3K	NUTPLATE
2	MS21062-3K	NUTPLATE

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.8 lbs

NAS1149CN432R
WASHER, REF

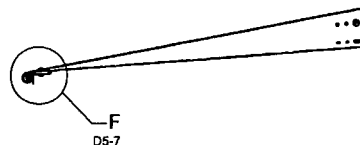
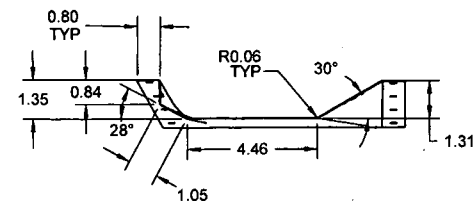
0.74
0.07

D3650-5B FWD PANEL
BENT PART
REF

MS20615-4M5
RIVET, REF

D3650-7-8.19 SEAL
D3650-9 ANGLE

DETAIL F
SCALE 3.5X



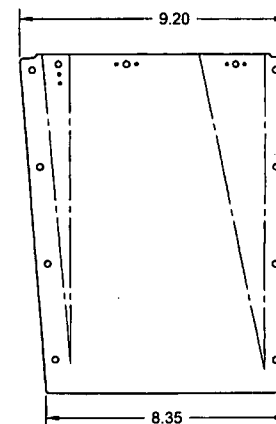
D3650-9 REF

D3650-7-8.19
REF

D3650-5B
FWD PANEL
BENT PART

CENTRE D3650-7/-9 ON D3650-5B &
TRANSFER Ø0.129 (#30 DRILL) HOLES
FROM D3650-9 TO D3650-7 & D3650-5B
AS SHOWN
INSTALL
MS20615-4M5 RIVET
NAS1149CN432R WASHER
12 PL

D3650-5 FWD PANEL



D3650-5B FWD PANEL BENT PART
(MAKE FROM D3650-5F FLAT PATTERN)

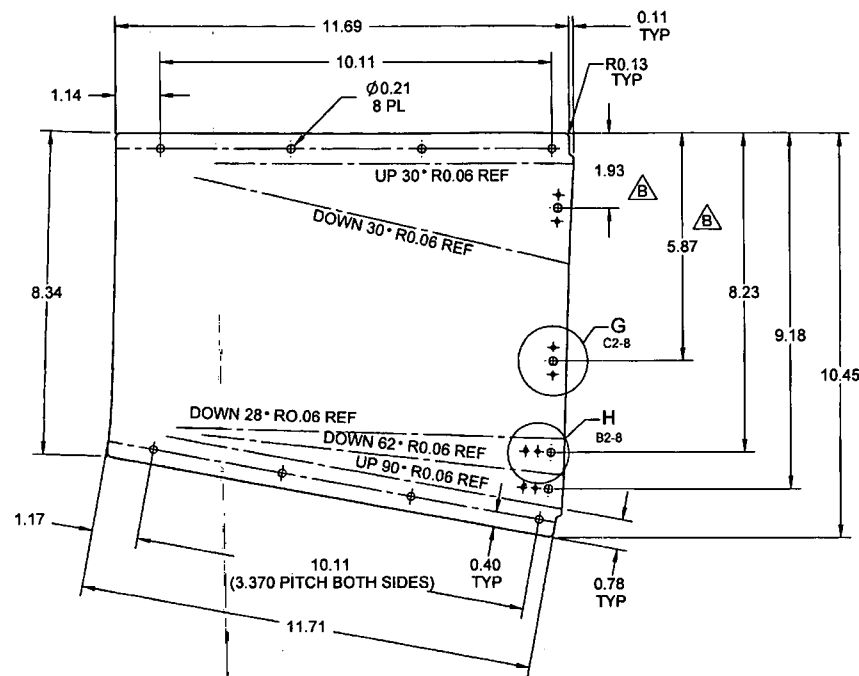
DEO ATTACHED

RELEASED
08/10/14

UNDER REVIEW
08/10/14

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3650	SHEET 7 OF 9
APPROVED		TITLE	SCALE
DE APPR.		TOP PANEL ASSEMBLY	NTS
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W/O 53488



D3650-5F FLAT PATTERN

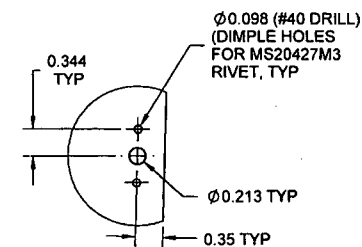
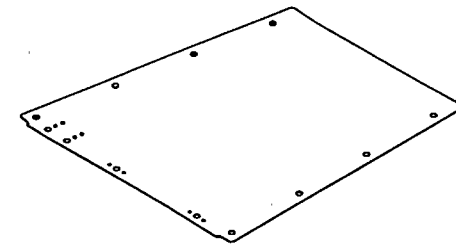
NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET, PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.6 lb

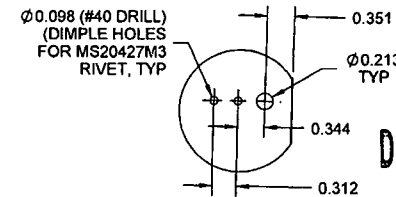
w/o 53458

UNDER REVIEW

OK 4/24/24



DETAIL G
2 PL
SCALE 1.5X



DETAIL H
2 PL
SCALE 1.5X

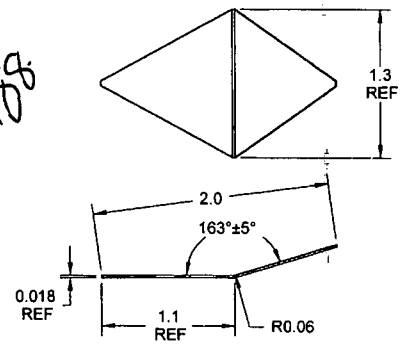
DEO ATTACHED

RELEASED
06/11/17

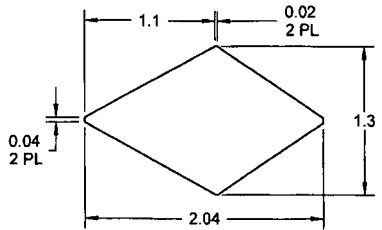
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DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. D3650	REV. C
MFG. APPR.	<i>[Signature]</i>	TITLE TOP PANEL ASSEMBLY	SHEET 8 OF 9
APPROVED	<i>[Signature]</i>	SCALE	NTS
DE APPR.	<i>[Signature]</i>	COPYRIGHT © 2007 BY DART AEROSPACE LTD	
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8 7 6 5 4 3 2 1

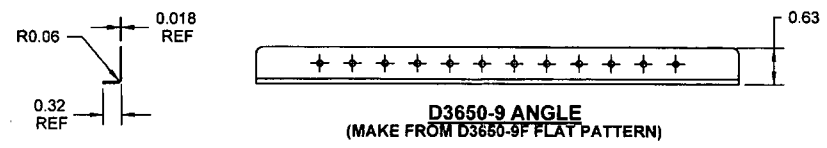
53488



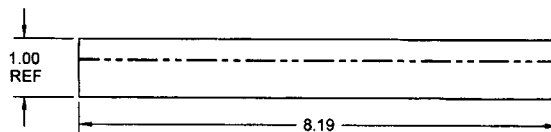
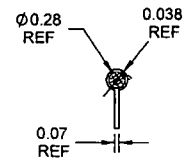
D3650-11 FILLER PLATE
(MAKE FROM D3650-11F FLAT PATTERN)



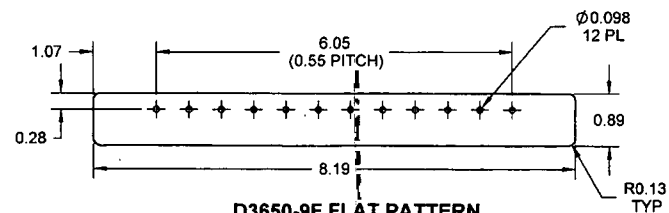
D3650-11F FLAT PATTERN



D3650-9 ANGLE
(MAKE FROM D3650-9F FLAT PATTERN)



D3650-7-8.19 SEAL



D3650-9F FLAT PATTERN

D3650-7-8.19 NOTES:

- 1) MATERIAL: P/N 8168-1 TADPOLE SEAL (REF. BELL P/N 120-104-1)
POSSIBLE SUPPLIER: EAGLE COPTERS OR BELL
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.05 lb
- 8) PART NUMBER: D3650-7-X.XX
WHERE X.XX = LENGTH IN INCHES
EG. 12.50" LONG = D3650-7-12.50

DEO ATTACHED

RELEASED
03/11/17

D3650-9 & D3650-11 NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 THICK (26 GAUGE) SHEET,
PER MIL-S-5059 OR AMS 5513/5524 (REF. DART SPEC. M304S26GA)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) D3650-9 WEIGHT: 0.05 lb
D3650-11 WEIGHT: 0.007 lb

UNDER REVIEW
01/07/08
01/01/24

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. C
MFG. APPR.	RF	D3650	SHEET 9 OF 9
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	TOP PANEL ASSEMBLY	NTS
DATE	08.10.14	<small>COPYRIGHT © 2007 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries